

Appl. No. 10/707,260  
Amdt. dated January 7, 2005  
Reply to Office action of October 19, 2004

### REMARKS/ARGUMENTS

In response to the Office action identified above, please accept the following remarks.

5

#### **1. Amendments to the drawings:**

The applicant respectfully requests amending the drawings of the present application to include the replacement sheets indicated in the  
10 Amendments to the Drawings section of this response. No changes were made to any of the drawing with the exception of additional labels (214, 216, 220, 226, 514, 517, 520, 526, 527, and 530c) to indicate more precisely which portions of the present invention in the drawings the text of the application is referring to and to put the present application in  
15 condition for allowance. No new material has been introduced.

#### **2. Amendments to the specification:**

The applicant respectfully requests amending paragraphs [0023] and  
20 [0037] in the specification of the present application as indicated in the Amendments to the Specification section of this response. The specification is amended to indicate the features shown in Figs. 5-6, and 16-17 more precisely and to put the present application in condition for allowance. No new material has been introduced.

25

Appl. No. 10/707,260  
Amdt. dated January 7, 2005  
Reply to Office action of October 19, 2004

**3. Response to the rejection to the specification:**

The disclosure is objected to because of the following informalities:

Paragraph 0001, replace lines 1-2 with --Field of the Invention. The  
5 present invention relates to a--

Paragraph 0002, replace lines 1-2 with --Description of the Prior Art.  
Bipolar junction transistors are--

Paragraph 0005, line 12, replace "enhancement region 13" with  
--enhancement region 123--

10 Paragraph 0030, line 6, replace "first doping region 214" with --first  
doping region 414--

Appropriate correction is required.

**Response:**

15

Paragraphs [0001], [0002], [0005], and [0030] have been corrected in  
the Amendments to the Specification section of this response as suggested  
by the examiner. No new matter is introduced. Reconsideration of the  
specification is hereby requested.

20

**4. Response to the rejection to claims 1-20:**

Claims 1-20 are rejected under 35 U.S.C. 112, second paragraph, as  
being indefinite for failing to particularly point out and distinctly claim the  
25 subject matter which applicant regards as the invention. In claims 1 and 12,  
last process step --performing a self-aligned silicidation process to form a

Appl. No. 10/707,260  
Amdt. dated January 7, 2005  
Reply to Office action of October 19, 2004

silicide layer on the surfaces of ... the third doping region ... of the vertical bipolar junction transistor—has no support. The examiner notes a silicide layer formed on the surfaces of the other regions, but not on the surface of the third doping region (220 of Fig. 5, 420 of Fig. 11, 520 of Fig. 16).

5

**Response:**

To overcome this rejection, Fig. 6 and Fig. 17 are amended to provide clear top views of the vertical bipolar junction transistor. In the amended Fig. 6, the silicide layer 230b is formed on the surface of the third doping region 220 not covered by the doping layer 226. In the amended Fig. 17, the silicide layer 530b is formed on the surface of the third doping region 520 not covered by the doping layer 526 and the SAB layer 527. Therefore, claims 1-20 are no longer indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Reconsideration of claims 1-20 is politely requested.

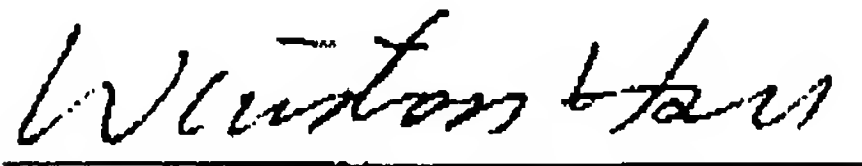
Applicant respectfully requests that a timely Notice of Allowance be issued in this case.

20

25

Appl. No. 10/707,260  
Amdt. dated January 7, 2005  
Reply to Office action of October 19, 2004

Sincerely yours,



Date: January 7, 2005

Winston Hsu, Patent Agent No. 41,526

5 P.O. BOX 506, Merrifield, VA 22116, U.S.A.

Voice Mail: 302-729-1562

Facsimile: 806-498-6673

e-mail : winstonhsu@naipo.com

- 10 Note: Please leave a message in my voice mail if you need to talk to me. The time difference between D.C. and Taiwan is 13 hours. The preferred time period for telephone conversation is 7 AM (or earlier) – 11 AM, D.C. time.

Attachment

15